

ABSTRACT OF THE DISCLOSURE

In a phase error detecting circuit used in a synchronous clock extracting circuit for extracting a clock which is synchronized with reproduced data, a cross reference value generator 72 inputs, as a rising cross reference value S5, rising phase error data S3
5 calculated in a phase error calculator 71 to a rising cross detector 70a and inputs, as a falling cross reference value S6, falling phase error data S4 similarly calculated to a falling cross detector 70b. Each of the cross detectors 70a and 70b calculates a difference value between the value of the reproduced data at a sampling point and the inputted cross reference value (cross offset value) S5 or S6 and outputs a rising or falling cross detection
10 signal when one of two difference values at consecutive sampling points is negative and the other thereof is positive. Accordingly, a capture range is enlarged.